

moisture, while drought was damaging in western Kansas. Further deterioration continued in these sections during the latter part of the month, but elsewhere the crop made mostly fair to very good progress. Harvest advanced in Texas and at the close of the month wheat was heading as far north as Pennsylvania. Oats did well during most of the month, except in some interior wet sections. Conditions were favorable for rice generally and flax seeding progressed fairly well, except for some local interruption by rain.

Corn.—Considerable corn planting was accomplished in the Ohio Valley States during the first part of the month, but rains interrupted this work toward the close of the first decade. Planting made very good progress in many sections of the upper Mississippi Valley, but was much behind an average season. Seeding was slow and very backward and had become seriously delayed in most of the Ohio Valley States at the close of the month. It made generally good advance in the Great Plains area, with cultivation progressing in southern sections.

Cotton.—Planting cotton advanced well generally, except in some central-northern portions of the belt and in the inundated sections, although planting was progressing on some of the higher ground in the previously overflowed territory at the close. The continued absence of rain in the eastern portion of the belt was generally unfavorable and resulted in rather poor germination and slow progress of the planted crop. Progress and condition of cotton were rather poor in Texas during the first half with deterioration in the drier sections, but conditions were more favorable during the latter half, with progress ranging from fair to very good; the condition of the crop varied greatly, from poor to very good. The early planted stood the drought well, but late planted in the drier districts deteriorated, with germination poor in the west

and north. Growth was fair to good in most other sections, and the crop was clean and generally well cultivated.

Ranges, pastures, and livestock.—Continued dry weather was unfavorable in the Southwest and caused some deterioration, especially in New Mexico and adjacent sections, where the range was barren in many parts. Generally good to excellent condition of the range prevailed in most of the Great Plains area and pastures were uniformly good in the East, except in the Southeast, where it was too dry. Some livestock losses occurred from stormy weather and the poor range caused much to be shipped out in New Mexico, but elsewhere livestock were generally good.

Miscellaneous crops.—Potato planting progressed to the northern border States, but this work was retarded the latter part of the month by continued rains or wet soil. Progress of potatoes was generally good in most sections where up, but sweet-potato transplanting was delayed in the Southeast by continued dry weather. Minor crops suffered from lack of moisture in most sections from Florida northward to North Carolina and condition in this area was poor, with much truck reported a failure on the Florida uplands. In most other sections of the country truck made generally good advance. Tobacco was affected by the drought in Florida and continued wet soil in Kentucky made conditions unfavorable for transplanting. Sugar-beet seeding was finished in Wyoming, with the early crops being thinned, and elsewhere they were growing well.

Fruits were generally good in most northern sections, although the early crop was showing the effects of the April freeze. Citrus continued to drop badly in Florida during most of the month due to continued absence of moisture, but this crop did well in California.

WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

NORTH ATLANTIC OCEAN

By F. A. YOUNG

The number of gales reported during May was not far from the normal shown on the Pilot Chart over the greater part of the steamer lanes, where in different 5° squares they were observed on from two to four days. Moderate conditions were the rule off both the American and European coasts, with the exception of a few days. In the region between the thirtieth and thirty-fifth parallels and the twenty-fifth and sixty-fifth meridians the number of days with heavy weather was somewhat in excess of the normal.

May was an exceptionally foggy month, especially over the Grand Banks and off the American coast, as fog was reported on 18 days in the former locality and on from 14 to 15 in the latter. There was also more fog than usual over the eastern section of the steamer lanes, where it occurred on from 3 to 9 days.

The results for Julianehaab, Greenland, were not given in the following table, as reports were missing on 10 days. Judging from data on hand there was a period of high pressure from the 13th to 15th, with a barometric reading of 30.12 inches on the former date; cyclonic conditions prevailed on the 21st, when a reading of 29.53 inches was recorded; the reports for the 22d and 23d are missing.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level, 8 a. m. (seventy-fifth meridian), North Atlantic Ocean, May, 1927

Stations	Average pressure	Departure ¹	Highest	Date	Lowest	Date
	Inches	Inch	Inches		Inches	
Belle Isle, Newfoundland.....	29.83	-0.11	30.20	5th.	29.48	9th.
Halifax.....	29.92	-0.08	30.44	22d.	29.48	26th.
Nantucket.....	29.92	-0.09	30.46	22d.	29.50	27th.
Hatteras.....	29.98	-0.03	30.36	22d.	29.76	16th.
Key West.....	30.02	+0.04	30.14	31st.	29.90	1st. ²
New Orleans.....	30.01	+0.05	30.18	31st.	29.84	28th.
Swan Island.....	29.88	+0.01	29.98	23d.	29.80	2d.
Turks Island.....	30.07	+0.07	30.14	13th.	29.96	28th.
Bermuda.....	30.08	+0.08	30.30	10th.	29.86	28th.
Horta, Azores.....	30.06	-0.08	30.32	9th.	29.78	18th.
Lerwick, Shetland Islands.....	30.02	+0.22	30.48	10th.	29.67	21st.
Valencia, Ireland.....	30.06	+0.11	30.42	11th.	29.64	2d.
London.....	30.05	+0.13	30.42	11th.	29.66	31st.

¹ From normals shown on H. O. Pilot Chart, based on observations at Greenwich mean noon, or 7 a. m., seventy-fifth meridian.

² And on other dates.

On the 1st a disturbance of limited extent was central near Hatteras, and moderate to strong northerly gales prevailed in that vicinity. On the 1st there was also a depression central near 50° N., 35° W., that afterwards increased considerably in intensity. The western Low moved northeastward along the coast, and on the 2d the center was near Sydney, Nova Scotia. The eastern

disturbance of the 1st had moved about 5° toward the eastward during the next 24 hours, and on the 2d moderate gales prevailed over the middle section of the steamer lanes, as well as the region between the Bermudas and fortieth parallel.

An area of low pressure was in the vicinity of Nova Scotia and Newfoundland on the 3d and 4th, respectively, and on the latter date westerly gales prevailed in the southerly quadrants, and also between the fortieth meridian and the Azores. This low then moved rapidly eastward and on the 5th and 6th was central near 46° N., 40° W., while on both dates northerly to northwesterly gales occurred between the thirty-fifth and fiftieth meridians.

From the 7th to 10th an area of low pressure lay over the western section of the Gulf of Mexico, and on the 8th and 9th winds of force 7 were encountered west of the 90th meridian.

Charts VIII to X cover the period from the 8th to 10th, inclusive, and give an idea of the conditions at the time of the airplane flight of Captain Nungesser.

From the 11th to 23d there were no disturbances of any extent or intensity, although a few reports of moderate gales were received, and areas of low pressure covered different sections of the ocean during this period.

Charts XI to XIII cover the period from the 19th to 21st, inclusive, showing the weather on the day before and on the two days included in Colonel Lindbergh's flight.

On the 24th St. Johns, Newfoundland, was near the center of a low that afterwards developed into the most severe disturbance of the month. On the 25th and 26th the center was near 45° N., 40° W., and on both of these dates severe westerly to northwesterly gales swept over the region between the fortieth and fiftieth parallels and the thirty-fifth and sixtieth meridians.

From the 27th until the end of the month moderate weather prevailed generally, except that on the 28th northwest winds of force 7 occurred in the vicinity of New York, and from the 29th to 31st moderate northerly gales were reported from a limited area east of the twenty-fifth meridian.

OCEAN GALES AND STORMS, MAY, 1927

Vessel	Voyage		Position at time of lowest barometer		Gale began	Time of lowest barometer	Gale ended	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Highest force of wind and direction	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
North Atlantic Ocean													
Olancho, Hond. S. S.	Puerto Cortez	New York	33 50 N.	76 00 W.	May 1	3a., 1	May 1	29.63	N	NNE., 7	N	N., 9	Steady.
Comte Rossa, Ital. S. S.	Naples	do.	38 01 N.	63 00 W.	do.	Mdt., 1	May 2	29.55	SW	SW., 10	NNW	SW., 10	SW.-NNW.
Vendam, Du. S. S.	Rotterdam	do.	48 40 N.	37 42 W.	do.	8p., 1	do.	29.20	SW	WSW., 8	W	WNW., 9	WSW.-NNW.
Maz Negro, Span. S. S.	Swansea	Montreal	48 06 N.	29 15 W.	do.	Noon, 2	May 3	29.35	SE	WNW., 2	ENE	WSW., 10	SE.-WNW.-ENE.
Steel Seafarer, Am. S. S.	Port Said	New York	38 47 N.	55 40 W.	May 4	10a., 4	May 4	29.83	W	W., 7	NW	NW., 9	W.-NW.
Providence, Fr. S. S.	Lisbon	Providence	40 25 N.	16 10 W.	do.	8a., 4	do.	29.85	SSW	Var.	SW	WNW., 9	W.-NW.
Maz Negro, Span. S. S.	Swansea	Montreal	45 15 N.	44 30 W.	May 5	9p., 5	May 6	29.32	SW	W., 8	NW	NW., 11	SW.-W.-NW.
Gunzenheim, Ger. S. S.	Emden	Portland, Me.	46 11 N.	42 14 W.	May 6	5a., 6	do.	29.06	NNW	NNW., 8	NNW	—, 11	Steady.
North Cornwall, Br. S. S.	Genoa	Montreal	44 43 N.	31 00 W.	do.	4a., 7	May 7	29.32	SW	SW., 9	WNW	SW., 9	SW.-W.-WNW.
Cherco, Ital. S. S.	Palermo	New York	36 18 N.	57 55 W.	May 7	1a., 8	May 8	29.46	SW	W., 9	NW	—, 9	SW.-W.-S.-NW.
Clontarf, Am. S. S.	Gibraltar	do.	36 00 N.	44 13 W.	May 8	Mdt., 8	May 9	29.82	SSW	S., 9	W	S., 9	S.-SSW.
North Cornwall, Br. S. S.	Genoa	Montreal	45 40 N.	38 00 W.	do.	3a., 9	do.	29.31	SSE	SSW., 9	W	SSW., 9	SSE.-S.-W.
Laura C. Ital. S. S.	Gibraltar	New York	35 04 N.	34 25 W.	May 12	10p., 12	May 14	29.97	NW	NW., 6	NNW	NW., 8	NW.-NNW.
Dekarian, Br. S. S.	Galveston	Liverpool	49 16 N.	22 27 W.	May 16	3a., 16	May 17	29.71	E	E., 8	E	—, 8	—
Middleham Castle, Br. S. S.	Antwerp	Habana	39 36 N.	29 06 W.	May 17	Noon, 17	May 18	29.73	NW	NW., 7	NE	NNE., 8	NW.-NNE.
Burgerdijk, Du. S. S.	Rotterdam	New York	41 03 N.	57 50 W.	May 19	8a., 19	May 20	29.78	SSW	SW., 8	WNW	SW., 8	Steady.
New York City, Br. S. S.	Cardiff	Philadelphia	43 50 N.	42 37 W.	May 23	2p., 24	May 26	28.84	SSE	SW., 11	WNW	SW., 11	S.-WNW.
Deutschland, Ger. S. S.	Southampton	New York	45 30 N.	37 15 W.	May 25	4p., 25	do.	29.29	SW	SW., 9	W	WNW., 11	SW.-WNW.
Stockholm, Swed. S. S.	Gothenburg	do.	46 54 N.	42 48 W.	do.	1p., 26	do.	29.62	SW	W., 11	NW	W., 11	SW.-W.-NW.
North Pacific Ocean													
Esther Dollar, Br. S. S.	Karatsu	San Francisco	46 50 N.	152 15 W.	May 1	2a., 1	May 2	29.58	NE	N., —	NW	N., 8	NE.-N.-NW.
Do.	do.	do.	43 42 N.	143 00 W.	May 4	2a., 4	May 4	29.98	SSE	SSE., —	SW	SSE., 8	SSE.-SW.
Mayebashi Maru, Jap. S. S.	Kobe	New York	45 05 N.	144 04 W.	May 1	8a., 2	May 3	29.72	SSW	SSW., 8	WNW	WSW., 9	SW.-WSW.
Hayo Maru, Jap. S. S.	Milke	Bellingham	48 59 N.	126 08 W.	May 2	2a., 3	do.	29.64	SE	SE., —	S	SE., 10	SE.-S.
Pres. Taft, Am. S. S.	Yokohama	Victoria	50 00 N.	153 00 W.	May 4	2a., 5	May 6	29.71	SSE	SSE., 8	S	SSE., 8	Steady.
City of Vancouver, Br. S. S.	Vancouver	Osaka	50 06 N.	174 52 E.	May 6	1p., 8	May 9	29.30	SE	SW., 6	W	WSW., 8	—
Oakridge, Am. S. S.	Yokohama	Portland	49 02 N.	163 15 W.	May 9	6p., 10	May 11	29.54	WNW	WNW., 7	NW	WNW., 9	WNW.-NW.
Tabchee, Br. S. S.	Shanghai	San Pedro	47 00 N.	157 30 E.	May 16	4a., 17	May 17	29.27	ENE	NE., 7	NE	NE., 8	ENE.-NE.
Alabama Maru, Jap. S. S.	Yokohama	Victoria	39 45 N.	140 55 E.	do.	4p., 16	May 18	29.17	W	WNW., —	NNE	NW., 8	W.-NW.-NNE.
Montague, Am. S. S.	Hong Kong	San Francisco	45 41 N.	167 10 E.	do.	8p., 16	May 19	29.47	E	E., 9	NW	E., 9	Steady.
West Hixton, Am. S. S.	Niigata	Portland	43 29 N.	147 25 E.	May 23	Mdt., 23	May 24	29.32	W	W., 8	W	W., 8	Steady.
West Nomentum, Am. S. S.	Columbia River	Yokohama	46 46 N.	159 21 E.	May 24	Noon, 24	do.	29.55	S	SW., 8	W	SW., 8	S.-SW.
Pawlet, Am. S. S.	Hong Kong	San Francisco	36 30 N.	143 40 E.	do.	10a., 24	May 25	29.59	ENE	E., 8	NE	E., 8	ENE.-E.
West Cayote, Am. S. S.	Dairen	Columbia River	48 48 N.	163 32 W.	May 29	6p., 30	May 31	28.97	E	E., —	SSE	E., 9	Steady.
West Hixton, Am. S. S.	Niigata	Portland	49 45 N.	170 06 W.	May 30	6a., 31	do.	29.58	N	NW., —	NW	NNW., 8	NNW.-NW.
South Pacific Ocean													
Tahita, Br. S. S.	San Francisco	Sydney	37 20 S.	161 43 E.	May 12	4p., 12	May 13	29.58	S	WSW., 1	SSW	SSW., 8	N.-WSW.
Mojave, Am. S. S.	Buenos Aires	San Pedro	50 02 S.	77 12 W.	May 18	4a., 20	May 20	29.20	SW	WNW., 7	SW	W., 11	SW.-NW.
South Atlantic Ocean													
Sabotawan, Am. S. S.	Santa Fe, Arg.	Wilmington, Del.	28 10 S.	45 00 W.	May 7	7a., 9	May 8	29.04	E	SW., 8	W	NE., 9	NW.-SW.
Mojave, Am. S. S.	Buenos Aires	San Pedro	38 32 S.	57 20 W.	May 11	1a., 12	May 12	29.89	W	SW., 8	S	SW., 8	W.-SW.
Lorraine Cross, Am. S. S.	Mobile	Montevideo	27 50 S.	44 50 W.	May 7	7a., 8	May 9	29.22	NW	SW., 9	SW	SW., 9	W.-SW.
Do.	do.	do.	34 45 S.	53 50 W.	May 12	4a., 12	May 13	29.84	NW	NW., 8	SW	SW., 8	NW.-SW.
West Neris, Am. S. S.	Buenos Aires	Santos	31 56 S.	49 45 W.	do.	10a., 12	do.	29.93	W	W., 7	WSW	WSW., 8	W.-WSW.